What Is Claimed Is:

- 1 1. A Thin-Film Transistor array structure, comprising:
- 2 a Thin-Film Transistor;
- a data line coupled to a drain electrode of the Thin-
- 4 Film Transistor;

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- 5 a scanning line coupled to a gate electrode of the
- 6 Thin-Film Transistor and crossed to the data line to form a
- 7 plurality of rectangular pixels in matrix;
- a pixel electrode formed at each of the pixels and coupled to a source electrode of the Thin-Film Transistor;
 - a sustaining electrode coupled to the pixel electrode, disposed on the pixel electrode and next to the data line and coplanar with the source electrode.
 - 2. The Thin-Film Transistor array structure as claimed in Claim 1, wherein a pattern constructed by the sustaining electrode, the source electrode and the data line is designed as a mask.
 - 3. The Thin-Film Transistor array structure as claimed
 - 2 in Claim 1, wherein the sustaining electrode is formed in
 - 3 an H-shaped pattern.
 - 1 4. The Thin-Film Transistor array structure as claimed
 - 2 in Claim 1, wherein the pixel electrode is coupled to the
 - 3 pixel electrode via a contact hole.
 - 5. The Thin-Film Transistor array structure as claimed
 - 2 in Claim 1, wherein the sustaining electrode is coupled to
 - 3 the pixel electrode via a contact hole.
 - 6. A Thin-Film Transistor array structure, comprising:

- 2 a Thin-Film Transistor;
- a data line coupled to a drain electrode of the Thin-
- 4 Film Transistor;
- 5 a scanning line coupled to a gate electrode of the
- 6 Thin-Film Transistor and crossed to the data line to form a
- 7 plurality of rectangular pixels in matrix; and
- 8 a pixel electrode formed at each of the pixels and
- 9 coupled to a source electrode of the Thin-Film Transistor
- 10 via a contact hole, disposed on the source electrode which
 - is extended to the region where the pixel electrode is next
 - to the data line.

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- 7. The Thin-Film Transistor array structure as claimed in Claim 6, wherein a pattern constructed by the source electrode and the data line is designed as a mask.
- 8. The Thin-Film Transistor array structure as claimed in Claim 6, wherein the source electrode is formed in a U3 shaped pattern.
 - 1 9. The Thin-Film Transistor array structure as claimed
 - 2 in Claim 6, wherein the pixel electrode is coupled to the
 - 3 pixel electrode via a contact hole.